



DISPLAYS FAQ

Q How much power does an LCD monitor use and how does the power-saving mode affect my electricity bill?

A Most LCD monitors use about 35W during normal operation. This is around 70 per cent less than an average CRT monitor, which draws around 105W. How much this costs per year is dependent on how many hours you have your monitor switched on and the cost of your energy.

An average electricity price is 11.277p per kilowatt hour (kWh, prices from Powergen). This is one hour's usage of 1kW (or 1,000W if you prefer) of energy. As your LCD draws only 35W (96.5 per cent less than 1kW) it costs 0.395p per hour. Typical office usage for a monitor is around 2,000 hours, so that's £7.90 a year. A CRT, by comparison, would cost £23.68 for the same usage.

Switching an LCD to power-saving mode can save you money, as it puts the monitor into standby mode when it's not being used. This drops power consumption to around 2W (0.022p) per hour. Say, for example, that for 2,000 hours' worth of usage, 300 hours were spent away from the computer. If those 300 hours were used on economy mode, you'd be spending only 6.6p compared to the £1.19 it would cost to run it at full power.

In total you'd save just over £1 per year by switching the power-saving mode on, and more if you're away from your desk more often. Buy a monitor such as Iiyama's ProLite X436S (see review, right), which automatically adjusts the monitor's brightness and turns on power saving as soon as you leave your desk, and you could save even more per year.

It might not sound like a lot of money, but you can save even more again by turning your monitor off when it's not in use, so that it's not using any power at all.

If you apply similar techniques to other electronic items, such as your printer and PC, then pretty soon you will really start to notice the difference.

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You can save money with a monitor that adjusts its brightness automatically by using a light sensor

REVIEW 17" LCD

Iiyama ProLite X436S

RATING ★★★★★

PRICE £228 inc VAT

SUPPLIER www.cclonline.com

DETAILS www.iiyama.co.uk

Whether you care about the environment or not, leaving your monitor on full power and brightness uses electricity, which costs you money. Switching it off or using the power-saving mode can save you a little (see our FAQ box, left).

Iiyama's ProLite X436S goes one step further. First, it has an infrared motion sensor in the front of the bezel. If nobody is sitting in front of the screen it goes into power-saving mode, automatically turning back on when you return. Second, it has a light sensor, so it can dynamically adjust the monitor's brightness according to the ambient light – lower brightness for dark rooms; higher brightness for light rooms. Both settings are turned off by default and the slightly fiddly onscreen display (OSD) makes it a little tricky to find them, but once you do they work really well.

There's a choice of digital or analogue inputs. Disappointingly, Iiyama only provides an analogue cable, so you'll have to pay around £20 extra if you want to use digital. We recommend this, though, as a digital connection increases the picture quality.

In general, image quality is very good. Our colour wheel test showed a decent range of colours, with excellent gradation between shades. Our greyscale tests, which are typically hard for a monitor to cope with, also came out well, with smooth gradation across the whole range. However,



vertical viewing angles aren't brilliant and we found that we had to be sitting directly in front of the screen to see an even distribution of light.

With its 8ms response time, the X436S is one of the fastest monitors on the market and we didn't notice any image blurring on fast-moving images such as games. The monitor also comes with a set of 2W speakers, but they're awful and distort on the lowest volume. As you have to use the OSD to change volume, they're not very practical either.

The thoughtful and innovative power-saving functions work really well, but vertical viewing angles and poor accessories let this package down.

David Ludlow



Clever power-saving functions; quick response time



No DVI cable in the box; poor speakers

SPECIFICATIONS 17" LCD, 1,280x1,024 native resolution, 8ms response time, 300cd/m² brightness, 700:1 contrast ratio, 2x 2W speakers, one USB2 port. **Part code** ProLite X436S

HOTLIST 19" LCD

Belinea 10 19 25

RATING ★★★★★

PRICE £236 inc VAT

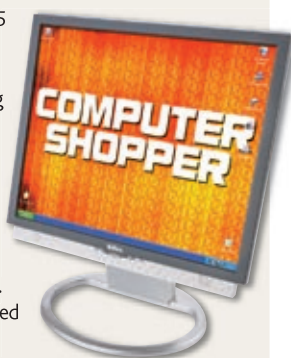
SUPPLIER www.0-one.co.uk

DETAILS www.belinea.co.uk

Belinea's 10 19 25 might be fairly ugly, but it has several redeeming features including excellent image quality. Colours are balanced and clean with an even backlight. Detail is maintained in dark areas, although skin tones lack warmth.

If you want a decent 19" LCD that doesn't cost a fortune, this is an excellent buy.

SPECIFICATIONS 1,280x1,024 native resolution, D-sub, DVI, speakers, three-port USB. **Part code** 10 19 25



HOTLIST 20.1" LCD

AOC LM2028

RATING ★★★★★

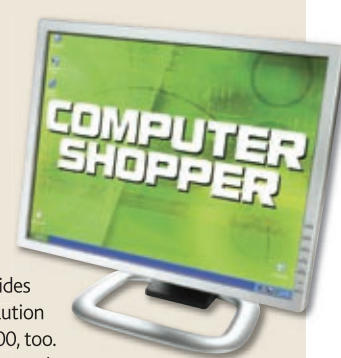
PRICE £348 inc VAT

SUPPLIER www.pcnextday.co.uk

DETAILS www.aocmonitor.com

AOC's LM2028 is cheaper than many 19" screens, but its 20.1" panel doesn't just give more display space, it provides a higher resolution of 1,600x1,200, too. It also produces a decent image, although whites aren't as true as we'd like. Unless you need perfect colour accuracy, though, it's a bargain.

SPECIFICATIONS 1,600x1,200 native resolution, D-sub, DVI. **Part code** TFT2090PS+



REVIEW DLP PROJECTOR

BENQ MP610

RATING ★★★★★

PRICE £648 inc VAT

SUPPLIER www.allpcstuff.co.uk
DETAILS www.benq.co.uk


BenQ's MP610 is a multipurpose projector that's designed primarily for business use, but it's also suitable for watching the occasional film or football match at home. It's quite cheap for a DLP projector, especially one with 2,000 lumens.

With this level of brightness you can use it under harsh office lighting, although bright daylight will still defeat it. For darker rooms you can use its economy mode, which dims the bulb slightly and increases bulb life from 3,000 hours to 4,000 hours.

The MP610 is very quiet, operating at just 25dB, so it won't interrupt a presentation in a quiet meeting room. Weighing less than 3kg and provided with a carry case, it is very easy to transport.

However, its low price means that BenQ has had to compromise somewhere, and there's a disappointing range of inputs, with D-sub, S-video and composite the only available options. We'd have liked to see a digital input.

The MP610 uses a 0.55" DLP chip, so its native resolution is 800x600, although it can handle higher-resolution inputs and display them well using compression. There's a 16:9 mode, which digitally resizes the picture, so it's not ideal for use as a home movie projector.

BenQ has also used the new golden ratio colour wheel, which uses five colours to increase the colour depth. While our colour wheel test

showed good gradation, we found that the Windows desktop looked a little washed out and lacklustre.

We also found the MP610 suffered badly from the rainbow effect. It's particularly noticeable on fast-moving images, such as videos or games, but move your head suddenly during a presentation and you'll see a rainbow flash of colour.

Finally, the MP610 has a 1W speaker, which is handy for presentations with sound, but no good for entertainment use. If you're looking for a cheap projector to carry around for presentations, the MP610 does a reasonable job, but the noticeable rainbow effect and small number of inputs mean it's not very good for anything else.

David Ludlow

✓ Bright; very quiet; comes with a carry case

✗ Noticeable rainbow effect; limited range of inputs

SPECIFICATIONS 0.55" DLP projector, 800x600 native resolution, 2,000 lumens brightness, 2000:1 contrast ratio, D-sub, S-video and composite inputs, 1W speaker. **Part code** 9J.J1B77.B5E

HOTLIST LCD TV

ACER AL2671W


RATING ★★★★★

PRICE £586 inc VAT

SUPPLIER www.dabs.com
DETAILS www.acer.com

The Acer AL2671W has the stylish look of a flat TV, but without the expense or hassle of a full home cinema setup. It has plenty of inputs, including DVI, and a 1,280x768 resolution making it ideal for upcoming HD content. Image quality is great, and the excellent sound is provided by pseudo-surround speakers. Home cinema fans should look elsewhere, but otherwise this is a real bargain.



SPECIFICATIONS 26" image, 1,280x768 native resolution, D-sub, DVI, two SCART and RF inputs, two 5W speakers. **Part code** EV.M0107.009

HOTLIST LCD PROJECTOR

PANASONIC PT-AE700

RATING ★★★★★

PRICE £1,050 inc VAT

SUPPLIER www.av-sales.co.uk
DETAILS www.panasonic.co.uk

The PT-AE700 is a home cinema projector and its native 16:9 widescreen ratio is ideal for DVD, gaming and digital TV. Every connector is provided including component, SCART and HDMI, so you can enjoy a wide range of media with excellent image clarity. It is also one of the quietest projectors we've used. Bulb life is up to 4,000 hours in low lamp mode, though this requires a fully darkened room.



SPECIFICATIONS Three 0.7" LCDs, 1,280x720 resolution, 1,000 lumens, 2000:1 contrast ratio. **Part code** PTAE700EC

CHOOSING A... PROJECTOR

Follow our step-by-step guide to buying the perfect projector

1 Low-cost projectors make two main sacrifices. The brightness, measured in ANSI lumens, will be relatively low and the native resolution will be limited to 800x600. Neither need be serious drawbacks provided you can dim the lights or draw the blinds and there isn't a huge amount of detail in your slides. Home cinema certainly doesn't demand anything more. Movie buffs are likely to be more concerned with the lamp life and replacement cost.

2 Image quality is obviously important but hard to assess from specifications alone. A high contrast (over 500:1) ratio adds depth to the picture and is one tangible benefit of projectors based on digital light processing (DLP) rather than the older LCD technology. The quality of the optics and colour balance can't be gauged without consulting a review, though.

3 Consider where you'll be using your projector; size and weight are important if the unit will be moved around a lot. You should aim for under 3kg if portability is an issue. Small rooms demand a quiet (sub-33dB) projector and a flexible throw distance – this tells you how close or far away the screen can be. Most projectors can mirror or rotate their image to cope with ceiling mounting or rear projection.

4 Check that the projector can cope with all the signals you might want to feed it. Common video formats are supported by almost all projectors, but high-resolution VGA signals and HDMI aren't. Highly detailed slides will display at their best only on pricier projectors with a 1,024x768 native resolution.

5 Top-of-the-range projectors have 2,000 ANSI lumens brightness or more, to outshine brightly lit rooms, and a host of useful features to make presentations look and sound slicker – and make things easier for the presenter. Anti-theft features are also worth investigating.

FILL IN YOUR SPECS HERE

(Recommended minimum in grey)

NATIVE RESOLUTION: 800x600

BRIGHTNESS: 1,000 ANSI Lumens

CONTRAST RATIO: 500:1

LAMP LIFE: 2,000 hours

CHECK: Weight, throw distance, noise